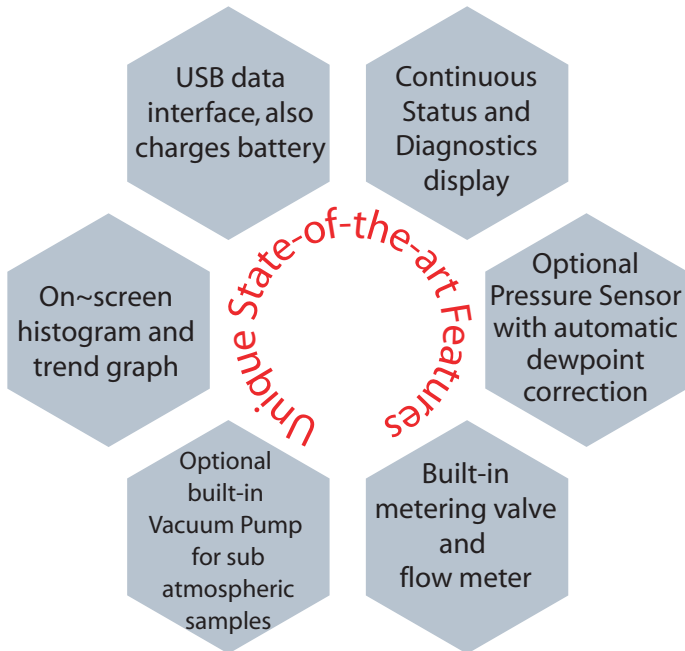


# PPBa PhyMetrix Portable Benchtop Moisture Analyzer



## Leading edge Nanosensor Technology



### more FEATURES

- -110°C to +20°C dewpoint Sensor
- Fast, Accurate and Repeatable
- Built-in temperature compensation
- Small & Lightweight
- State-of-the-art electronics & software
- Graphical display
- Advanced User-friendly Interface
- Programmable data logging
- Battery backed clock/calendar
- Built-in Sensor desiccant store for rapid results
- 316 Stainless Steel & PTFE wetted parts
- 1/8" Swagelok® compression fittings
- NIST calibrations
- optional 4/20 mA output

### APPLICATIONS

- Petrochemical
- Industrial Gases
- Natural Gas
- Power Generation
- Furnace Gas / Heat Treating
- Air Dryers
- Pharmaceutical
- Aerospace
- Medical



**PhyMetrix, Inc.**  
Moisture Measurement  
Innovation at work

- ◆ Test
- ◆ Measure
- ◆ Calibrate
- ◆ Quick
- ◆ Reproducible
- ◆ NIST Traceable

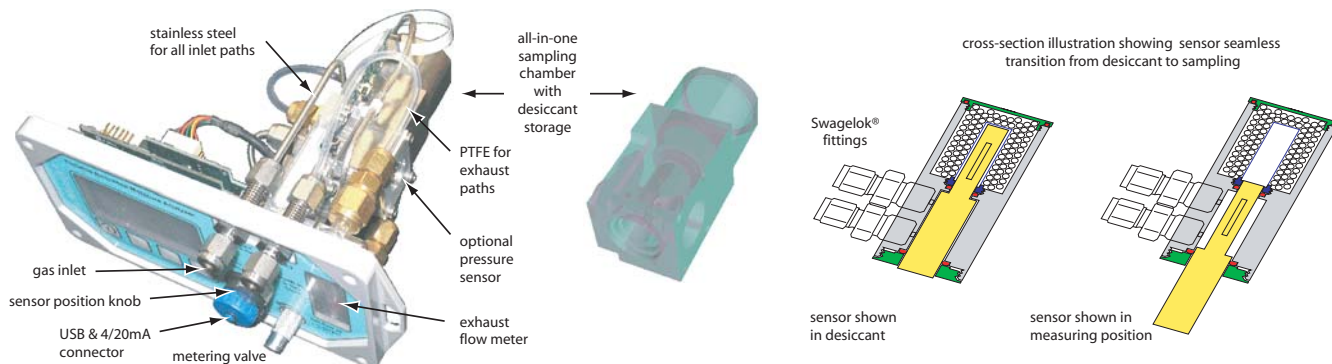
Proudly Designed, Developed and Manufactured in the USA



# PPBa PhyMetrix Portable Benchtop Moisture Analyzer



Retractable Sensor



PPBa Technical Specifications

Moisture Sensor	Range: -110°C to +20°C dewpoint (-166°F to +68°F dewpoint) Accuracy: ±2°C (3.6°F) temperature corrected Response time: 95% of step change in 3 min. Repeatability: 0.8°C (1.5°F) Sample flow: >1 LPM
Temperature Sensors	Range: -40°C to +70°C (-40°F to +158°F) Accuracy: ±2°C (3.6°F)
Pressure Sensor	0 to 150 PSIA ±1%, 316L stainless steel wetted parts
Flow meter	Body: Styrene Acrylonitrile, Max Pressure: 50 psi (3.4 bar) [ this pressure limitation is for the exhaust ]
Inlet Metering Valve	Max pressure: 2000 psi (137 bar) [ this pressure limitation is for the inlet, and can be utilized only if outlet is unrestricted ]
Ergonomics	<ul style="list-style-type: none"> <li>• Easy to carry or use on desktop, lightweight 3.5 Lbs</li> <li>• Easy to read graphic LCD display with user controlled backlight brightness (LCD is readable without the backlight)</li> <li>• Snap dome tactile membrane switches with dynamically assigned legends</li> <li>• Audible feedback upon button press as well as for warnings and alarms</li> <li>• Auto scaling graph / histogram on moisture measurement display for stability verification</li> <li>• Easy to use with verbose built-in context sensitive Help screens</li> <li>• Battery Saver, with user selectable Auto-power-down times, can also be disabled</li> <li>• Built-in pressure measurement and pressure corrected moisture readings, simultaneously displayed with the uncorrected reading for greater ease of understanding</li> <li>• Verbose Status bar with indications, warnings and audible errors</li> <li>• User selectable locking with or without a password.</li> <li>• Built-in battery backed clock calendar</li> </ul>
Electrical	External AC Universal Power adapter (100-240VAC 50-60Hz) with USB connector Rechargeable Li-Ion battery, recharges through the USB connector from the PC or from the supplied universal power adapter Sampling system and sensor are isolated from electrical interface and supply grounds Measurement resolution of moisture sensor: 1pF resulting in less than 0.01°C External power and I/O: USB mini B female connector - IP67 / IP68 with Sealing Cap
Mechanical	1/8" Swagelok® Inlet and Outlet bulkhead fittings All 316 Stainless Steel and PTFE wetted parts, small surface area stainless steel sampling chamber for fast response time. Integral Sensor retraction into desiccant storage chamber for fast response-time when measuring low moisture Enclosure Extruded aluminum Dimensions- L: 7.83" (199mm) W: 6.38" (162mm) H: 3.32" (84mm) Weight Total: 3.5 Lbs (1.6 Kg) Pressure: Inlet 2000 psi (137 bar) Outlet 50 psi (3.4 bar)
Temperature Range	PPBa Analyzer: -20°C to +60°C Moisture Sensor: -20°C to +60°C LCD operating: -20°C to +70°C storage: -30°C to +80°C Electronics: -40°C to +85°C Pressure Sensor: -20°C to +85°C
Miscellaneous Features	NIST traceable calibrations Built-in metering valve and flow meter, no need for external pressure regulator etc... Units of measure: °C & °F dewpoint, ppmV, ppmW, µB H <sub>2</sub> O vapor pressure, grams of H <sub>2</sub> O / m <sup>3</sup> and Lbs H <sub>2</sub> O / 10 <sup>6</sup> standard cubic feet in Natural Gas. (All units autoscaled) Digital & Analog I/O: USB, 4/20mA with HART® Data logging - single point, multipoint, time stamping, each sample records: dewpoint, temperature and pressure, ( memory > 4,000 samples) Built-in Vacuum Pump Option, for low pressure or sub atmospheric sample sources. Includes internal dedicated battery and external charger. Virtual Analyzer PC software for training and evaluation, allows the user to experience the exact interface on their own PC with voice explanations

ORDERING INFORMATION	Part Number
<b>PhyMetrix Portable Benchtop Analyzer Model: PPBa</b> Included Accessories: USB cable (mini B male to A male) AC universal power adapter with USB connector	<b>PPBa</b>
Pressure sensor option 0-150 psia w/automatic pressure correction	suffix <b>-P</b>
Analog Output 4/20 mA with HART® option	suffix <b>-A</b>
Intrinsically Safe ATEX option	suffix <b>-I</b>
Vacuum Pump, built-in includes battery and external charger	suffix <b>-V</b>

Represented by:

Ordering example: part number for the Analyzer with a Pressure Sensor and 4/20mA would be: **PPBa-P-A**

Doc. Revision 5